

c. measuring the binding of said antigen mixture to said HIV antibody.

16. An immunoassay method for detection of an antibody against HIV comprising:

- a. providing a sample suspected of containing an antibody against HIV,
- b. contacting said sample with at least one antigen mixture selected from the group consisting of a mixture of an antigen derived from the epitope region II of the Consensus sequence of an HIV1-subtype D isolate and an antigen derived from the corresponding region of gp41 of a different HIV1 subtype of the M group and a mixture of an antigen of epitope region I of the Consensus sequence of an HIV1-subtype E isolate and an antigen derived from the corresponding region of gp41 of a different HIV1 subtype of the M group, and
- c. measuring the binding of said antigen mixture to said HIV antibody.

17. The method of claim 15 wherein said antigen of gp41 of an HIV1-subtype D isolate corresponds to a sequence selected from the group consisting of SEQ ID NOs. 1 to 11 and partial sequences thereof.

18. The method of claim 15 wherein said antigen of gp41 of an HIV1-subtype E isolate corresponds to a sequence selected from the group consisting of SEQ ID NO. 12 and partial sequences thereof.

19. An antigen mixture comprising an antigen of gp41 of an HIV1-subtype D isolate and an antigen derived from gp41 of a different HIV1 subtype of the group M.

20. An antigen mixture comprising an antigen of gp41 of an HIV1-subtype E isolate and an antigen derived from gp41 of a different HIV1 subtype of the group M.

21. The antigen mixture of claim 19 wherein said antigen of gp41 of an HIV1-subtype D isolate is derived from epitope region II of the Consensus sequence of HIV1-subtype D.

22. The antigen mixture of claim 20 wherein said antigen of gp41 of an HIV1-subtype E isolate is derived from epitope region I of the Consensus sequence of HIV1-subtype E.

23. The antigen mixture of claim 19 wherein said antigen of gp41 of an HIV1-subtype D isolate corresponds to a sequence selected from the group consisting of SEQ ID NOs. 1 to 11 and partial sequences thereof.

24. The antigen mixture of claim 20 wherein said antigen of gp41 of an HIV1-subtype E isolate corresponds to a sequence selected from the group consisting of SEQ ID NO. 12 and partial sequences thereof.

25. The antigen mixture of claim 19, further comprising an antigen derived from epitope region I or II of HIV1-subtype O.

26. The antigen mixture of claim 20, further comprising an antigen derived from epitope region I or II of HIV1-subtype O.

27. An antigen comprising a sequence selected from the group consisting of SEQ ID NO 12 and partial sequences thereof, said sequence having a minimum length of 6 amino acids.

28. An immunoassay method for detection of an antibody against HIV comprising:

- a. providing a sample suspected of containing an antibody against HIV,
- b. contacting said sample with an antigen comprising a sequence selected from the group consisting of SEQ ID NO 12 and partial sequences thereof, said sequence having a minimum length of 6 amino acids, and
- c. measuring the binding of said antigen to said HIV antibody.

29. An immunoassay method for detection of an antibody against HIV comprising:

- a. providing a sample suspected of containing an antibody against HIV,

- b. contacting said sample with an antigen comprising a sequence selected from the group consisting of SEQ ID NOs. 1 to 11 and partial sequences thereof, said sequence having a minimum length of 7 amino acids, and
- c. measuring the binding of said antigen to said HIV antibody.

30. A reagent for the detection of an antibody against HIV by means of an immunoassay comprising an antigen mixture comprising an antigen of gp41 of an HIV1-subtype D isolate and an antigen derived from gp41 of a different HIV1 subtype of the group M.

31. A reagent for the detection of an antibody against HIV by means of an immunoassay comprising an antigen mixture comprising an antigen of gp41 of an HIV1-subtype E isolate and an antigen derived from gp41 of a different HIV1 subtype of the group M.

32. The reagent of claim 29 wherein said antigen of gp41 of an HIV1-subtype D isolate is derived from epitope region II of the Consensus sequence of HIV1-subtype D.

33. The reagent of claim 30 wherein said antigen of gp41 of an HIV1-subtype E isolate is derived from epitope region I of the Consensus sequence of HIV1-subtype E.

Respectfully submitted,

Marilyn L. Amick

Marilyn L. Amick, Reg. No. 30,444
Roche Diagnostics Corporation
9115 Hague Road, Bldg. D
P.O. Box 50457
Indianapolis, IN 46250-0457
Telephone: (317) 576-7561

Date: November 15, 1999